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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/633,249	07/31/2003	Kenneth J. Ouimet	2297-050CON	4787
7590	05/12/2004		EXAMINER	
Meschkow & Gresham, PLC Suite 409 5727 N. 7th Street Phoenix, AZ 85014			COSIMANO, EDWARD R	
			ART UNIT	PAPER NUMBER
			3629	

DATE MAILED: 05/12/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/633,249	OUIMET, KENNETH J.	
	Examiner	Art Unit	
	Edward R. Cosimano	3629	<i>MW</i>

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 31 July 2003.
 2a) This action is **FINAL**. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-8 is/are pending in the application.
 4a) Of the above claim(s) none is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 1-8 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on 31 July 2003 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>2003/07/31</u> . | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____. |

1. Applicant should note the changes to patent practice and procedure:
 - A) effective December 01, 1997 as published in the Federal Register, Vol 62, No. 197, Friday October 10, 1997;
 - B) effective November 07, 2000 as published in the Federal Register, Vol 65, No. 54603, September 08, 2000; and
 - C) Amendment in revised format, Vol. 1267 of the Official Gazette published February 25, 2003.
2. The drawings are objected to because
 - A) the drawings must show every feature of the invention specified in the claims, therefore, the subject matter of:
 - (1) claim 1-8, in regard to each of the particular functions recited in the steps of the claimed method, must be shown in the drawings as required by 37 CFR § 1.83(a) or the feature(s) canceled from the claim(s) (note: no new matter should be entered).
 - B) the following errors have been noted in the drawings:
 - (1) the drawings lack fig. 5B as discloses at the end of paragraph number 117 on page 30, "The output from step 1204 ... Table portion 116 of memory 104, as showing in Fig. 5B.".
 - (2) fig. 12 does not depict what is disclosed in paragraph number 136 on page 33, "If the values ... are null ... table. In this case, the situation of the routine skips directly to step 1406. If ... that is impossible to attain.".
 - (3) The drawings are objected to as failing to comply with 37 CFR § 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description:
 - (a) 112, 113, 114 & 115 of fig. 3 as this figure is described in paragraph number 73 on page 18, As shown in Figure 3, ... system may exist as a network device.".

2.1 A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

2.2 Applicant is required to submit a proposed drawing correction in reply to this Office action. However, formal correction of the noted defect may be deferred until after the examiner has considered the proposed drawing correction. Failure to timely submit the proposed drawing correction will result in the abandonment of the application.

3. The disclosure is objected to because of the following informalities:

A) applicant must update:

(1) the continuing data on page 1,

with the current status of each of the referenced applications, e.g., --now abandoned--, or --now patent #?--, or --which is abandoned and now serial number #?--, etc.

B) as required by 37 CFR § 1.84(p(5)) and 37 CFR § 1.121(e) the specification lacks an explicit reference to the nature of:

(1) reference legend(s):

(a) 112, 113, 114 & 115 of fig. 3 as this figure is described in paragraph number 73 on page 18, As shown in Figure 3, ... system may exist as a network device.”.

In this regard, it is noted that merely mentioning either a feature or a number without mentioning the device or operation or number or feature relies on the drawing to provide support for the disclosure and not to aid in the understanding of the invention, as is the purpose of the drawings (37 CFR § 1.81(a,b)).

C) the following errors have been noted in the specification:

(1) since paragraph number 30 on page 10, “For specific enterprise planning models ... analytic expressions for the optimum values”, does not end with a period, it is unclear whether or not this paragraph is to end or would contain additional disclosure that is missing.

(2) as can be seen in fig. 9 and from the context of:

(a) the brief description of fig. 9 in paragraph number 42 on page 13, "Figure 9 shows ... stored in memory for a Constraint Overview table and a corresponding list of bounds."; and

(b) paragraph number 117 on page 30, "The output from step 1204 ... Table portion 116 of memory 104, as showing in Fig. 5B.";

in the last line of paragraph number 117 on page 30, "Fig. 5B" should be --Fig. 9--.

D) the subject matter of:

(1) claim 6 in regard to "said weighting factors adjusting an effect that said constraint function has on said effective objective function;

(2) claim 7 in regard to "said representing operation defines said strategic constraint to be non-limited by said physical constraints of said enterprise planning model"; and

(3) claim 8 in regard to "said representing operation defines said strategic constraint to be limited by physical constraints of said enterprise planning model";

lacks antecedent basis within the specification as required by 37 CFR § 1.75(d1).

Appropriate correction is required.

4. The specification and drawings have not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification or drawings. Applicant should note the requirements of 37 CFR § 1.74, § 1.75, § 1.84(o,p(5)), § 1.121(a)-1.121(f) & § 1.121(h)-1.121(i).

5. Claims 1-8 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5.1 In regard to claims 1-8, as recited in claim 1, the method obtains the "economic cost of implementing a strategic constraint", however, since the remainder of the claim fails to either

consider or associate a cost/value with any of the claimed features, it is unclear how the cost of the strategic constraint can be obtained as required by the language of the claim.

5.2 The subject matter of:

A) claim 6 in regard to "said weighting factors adjusting an effect that said constraint function has on said effective objective function;

B) claim 7 in regard to "said representing operation defines said strategic constraint to be non-limited by said physical constraints of said enterprise planning model"; and

C) claim 8 in regard to "said representing operation defines said strategic constraint to be limited by physical constraints of said enterprise planning model"; lacks antecedent basis within the specification as required by 37 CFR § 1.75(d1).

5.3 For the above reason, applicant has failed to particularly point out what is regarded as the invention.

6. 35 U.S.C. § 101 reads as follows:

"Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter or any new and useful improvement thereof, may obtain a patent therefore, subject to the conditions and requirements of this title".

6.1 Claims 1-8 are rejected under 35 U.S.C. § 101 because the invention as claimed is directed to non-statutory subject matter.

6.1.1 Although the instant claims recite:

1) a method, (claims 1-8), which has a disclosed practical application in the technological arts, and

2) which do not define either a computer program, a data structure, non-functional descriptive material, (i.e. mere data) or a natural phenomenon, the instant claims merely define a series of steps to be performed on a computer.

6.1.2 In regard to claims 1-8, the invention as set forth in these claims merely describes:

A) selecting a primary goal for an enterprise which is represented by an objection function based on a set of operational values;

- B) representing a strategic constraint as a constraint function which is based on a subset of operational values;
- C) optimizing the objective function using values with in the constraint function; and
- D) using the results of the optimization to determine the cost of implementing the strategic constraint on the enterprise.

However, as recited in the claims the result of the claims, that is a hypothetical cost, is not used or applied in such a manner so as to be tangibly used in a concrete manner and hence to produce a useful concrete and tangible result, that is a tangible application with in the technological/useful arts.

6.1.3 It is further noted that applicant has not recited in the claims a specific process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, which is either altered or changed or modified by the invention recited in claims.

6.1.4 It is further noted that applicant has not claimed either:

- A) pre computer processing, since the claims fail to recited that the data, which originates from an unknown source, is manipulated or changed before it is processed, or
- B) post computer processing, since the claims fail to recited that the data which represents the result of the claimed manipulation is either manipulated or used or changed by any device after it has been processed.

6.1.5 In view of the above, the invention of claims 1-8 merely manipulates the abstract idea of generating a one or more data structure which are applied to optimization process to obtain an estimated hypothetical cost.

6.1.6 In view of the above, it is further noted that the invention of claims 1-8 lacks a claimed practical application since the claimed invention, either:

- A) does not have the functionality required to carry out the recited steps or functions of the claimed invention; or
- B) is not used by any system or device or method outside of the claimed invention,

in a concrete and tangible manner, (note In re Beauregard 35 USPQ2d 1383 (CAFC 1995) and the associated claims of U.S. Patent 5,710,578; and State Street Bank & Trust Co. v. Signature Financial Group Inc. 47 USPQ2d 1596 (CAFC 1998)).

6.1.7 It is further noted that the type/nature of either the data or the calculated numbers does not affect the operation of the claimed invention and hence are considered to be non function descriptive material, (note In re Gulack, 703 F.2d 1381, 1385, 217 USPQ 401, 404 (Fed. Cir. 1983)).

6.1.8 In practical terms, claims define nonstatutory processes if they:

- A) consist solely of mathematical operations without some claimed practical application (i.e., executing a “mathematical algorithm”); or
- B) simply manipulate abstract ideas, e.g., a bid (Schrader, 22 F.3d at 293-94, 30 USPQ2d at 1458-59) or a bubble hierarchy (Warmerdam, 33 F.3d at 1360, 31 USPQ2d at 1759),

without some claimed practical application.

6.1.9 Hence, claims 1-8 are directed to an abstract exercise which is not in the technological arts, that is useful arts and hence are directed to non-statutory subject matter.

7. In regard to the following prior rejections, since the economic cost of implementing the strategic constraint is not disclose in the parent application now patent number 6,308,162, the effective filling date of the claimed invention is September 09, 2001.

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an

international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8.1 Claims 1-8 are rejected under 35 U.S.C. § 102(b) as being clearly anticipated by O'Brien (WO 95/26007).

8.1.1 In regard to claims 1-5, 7 & 8, O'Brien ('007) teaches selecting a primary goal of, i.e., travel model, that would minimize the travel/economic costs incurred by an enterprise by using an objection function that includes business related travel requirements and a constraint function that includes the operational constraints of the enterprise to generate a number of different travel models/scenarios in order to determine a planed travel model that if implemented would achieve the primary goal of the enterprise.

8.1.2 In regard to claim 6, since some business trips may be of more importance to the enterprise than other business trips, it would be inherent that the operational constraints of the enterprise in O'Brien ('007) would use some sort of weighting scheme in order to distinguish the priority of a particular business trip.

8.2 Claims 1-8 are rejected under 35 U.S.C. § 102(e) as being clearly anticipated by Kosiba et al (2002/0184069).

8.2.1 In regard to claims 1-5, 7 & 8, Kosiba et al ('069) which teaches selecting a primary goal of, i.e., hiring model, that would minimize the hiring/economic costs incurred by an enterprise by using an objection function that includes business related service requirements and a constraint function that includes the operational constraints of the enterprise to generate a number of different hiring/termination models/scenarios in order to determine a hiring/termination model that if implemented would achieve the primary goal of the enterprise.

8.2.2 In regard to claim 6, since some position in a business may be of more importance to the enterprise than other positions with in the business, it would be inherent that the operational constraints of the enterprise in Kosiba et al ('069) would use some sort of weighting scheme in order to distinguish the priority of a particular position within the business over another position within the business.

9. The examiner has cited prior art of interest, for example:

- A) Weaver, which teaches that it is estimated, based on current costs, that compliance with the clean air act now will save companies money in the future since they will reap the benefits of using SO₂ allowances.
- B) Strothmann (5,745,880) which discloses estimating/predicting the future cost to an enterprise for conversion to a new system/machine based on the current operating costs and any new training and/or facilities that may be required for the new machine.
- C) either Ouimet et al (WO 98/53416 or 6,308,162) which disclose the optimization of enterprise planning models as claimed but without the determining of the cost of implementing a planning model.
- D) Tani et al (2004/0019519) which teaches selecting a primary goal/objective of an enterprise that would minimize the economic costs incurred by an enterprise if the goal/objective of the enterprise is implemented by the enterprise.

9.1 Applicant must supply the incorporated material from the prior art mentioned:

- A) at the end of paragraph number 113 on pages 28-29;
- B) in paragraph number 145 on page 35;
- C) in paragraph number 157 on page 38;

“W. Press et. al., Numerical Recipes: The Art of Scientific Computing, Cambridge University Press, New York (1992)”.

9.2 Reference number 3 on page 2 of the PTO-1449 filed July 31, 2003 has not been considered, since can not be located in either the parent file serial number 09/084,156 or the instant file. Further it appears that this citation is in fact duplicate citation of reference number 4 on page 2 of the PTO-1449 filed July 31, 2003.

10. Applicant’s claims for the benefit of an earlier filing date under 35 U.S.C. § 119(e) and 35 U.S.C. § 120 are acknowledged.

11. The shorten statutory period of response is set to expire 3 (three) months from the mailing date of this Office action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edward Cosimano whose telephone number is (703) 305-9783. The examiner can normally be reached Monday through Thursday from 7:30am to 6:00pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Weiss, can be reached on (703)-308-2702. Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-1113.

- 12.1 The fax phone number for UNOFFICIAL/DRAFT FAXES is (703) 746-7240.
- 12.2 The fax phone number for OFFICIAL FAXES is (703) 872-9306.
- 12.3 The fax phone number for AFTER FINAL FAXES is (703) 872-9306.

05/05/04

Edward Cosimano
Edward R. Cosimano
Primary Examiner A.U. 3629